

Labour Costs Workshop Rome 5-6 May 2015

Agenda Item 3.1 LCS consistency and plausibility

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Main items discussed

- Plausibility of LCS data:
 - Total hours worked;
 - Number of employees;
 - Hourly labour cost
- Consistency with other sources (LCI / LFS / NA)
 - 2012 levels;
 - 2012 / 2008 growth rates



Background (1)

- Importance of <u>reliable</u> and <u>harmonised</u> LCS data
- analysis of level/structure/development of labour costs
- policy making

Main users: EU Member States & other EU stakeholders

Main variables: labour costs & nb of hours worked

- -> important per se (labour input, wage/non-wage split)
- -> inputs of the **Hourly Labour Cost**

Quality: assessed through a comparison of LCS with other statistics



Background (2)

Comparison with other statistics

Objectives

- Limitations
- Spot outliers / problems
 Methodological differences
- Quality assurance & plausibility of data

- Different scope (e.g. 10+ versus total economy)
- Different statistical units (e.g. enterprises vs households for LFS)
- ->Levels not compared directly but as shares in total economy
- ->Broad use of comparisons in *changes*



I. Number of hours worked & employees

- Levels (2008 & 2012)

Differences (LCS vs NA) in percentage points in the share of hours worked, by sector, as % of national

| BE BG CZ DK DE EE IE EL ES | 0.1 0.4 4.2 3.6 6.0 1.1 1.0 5.1 2.6 | -1.3 -0.6 -1.5 -1.6 -2.2 -3.6 -2.9 -5.1 | -2.2 -3.2 -2.9 -2.0 -1.2 -0.7 2.1 | -1.9 1.0 1.2 0.1 0.8 2.1 1.1 | -3.9 1.1 -0.2 2.0 0.9 | 4.8 1.4 0.9 1.1 -0.2 1.9 | 4.1 0.8 0.1 0.6 0.4 |
|----------------------------|---|--|---|--|-----------------------------------|---|---------------------------------|
| CZ DK DE EE IE EL | 4.2 3.6 6.0 1.1 1.0 5.1 2.6 | -1.5 -1.6 -2.2 -3.6 -2.9 -5.1 | -2.9 -2.0 -1.2 -0.7 2.1 | 1.2 0.1 0.8 2.1 | 1.1 -0.2 2.0 | 0.9 1.1 -0.2 | 0.1 0.6 0.4 |
| DK DE EE IE EL | 3.6 6.0 1.1 1.0 5.1 2.6 | -1.6 -2.2 -3.6 -2.9 -5.1 | -2.0 -1.2 -0.7 2.1 | 0.1 0.8 2.1 | -0.2 2.0 | 1.1 -0.2 | 0.6 0.4 |
| DE EE IE EL | 6.0 1.1 1.0 5.1 2.6 | -2.2 -3.6 -2.9 -5.1 | -1.2 -0.7 2.1 | 0.8 2.1 | 2.0 | -0.2 | 0.4 |
| EE IE EL | 1.1 1.0 5.1 2.6 | -3.6 -2.9 -5.1 | -0.7 2.1 | 2.1 | | | |
| IE EL | 1.0 5.1 2.6 | -2.9 -5.1 | 2.1 | | 0.9 | 1.0 | |
| EL | 5.1 2.6 | -5.1 | | 1 1 | 0.0 | 1.9 | 1.4 |
| | 2.6 | | 4.4 | 1.1 | 2.0 | 0.1 | -0.2 |
| LCC | | 0.5 | -4.4 | -0.3 | - : | 3.9 | 4.2 |
| ES | 0.5 | -2.5 | -0.5 | 2.4 | 0.6 | -1.6 | 1.2 |
| FR | 6.5 | -1.3 | -0.3 | -3.0 | • | | 0.2 |
| HR | : | | : | | | | : |
| IT | 4.2 | -2.5 | -1.8 | 0.7 | | 2.6 | 1.0 |
| CY | 3.5 | -2.1 | -2.3 | -0.3 | -0.6 | 1.8 | -0.2 |
| LV | 0.3 | -2.2 | -2.6 | 0.3 | 2.3 | 3.7 | 1.0 |
| LT | -1.0 | -1.2 | -2.7 | 1.0 | 1.3 | 2.3 | 1.0 |
| LU | 2.4 | 0.3 | -1.2 | | | -4.0 | 0.7 |
| HU | : | : | : | | | | : |
| MT | : | : | : | : | | | : |
| NL | 8.0 | -0.2 | -1.7 | 1.4 | 1.1 | 0.7 | 0.7 |
| AT | 3.8 | 0.1 | 0.6 | 1.3 | : | -2.7 | -1.4 |
| PL | 1.1 | -3.5 | 0.3 | 0.9 | -2.8 | 0.5 | 0.6 |
| PT | 3.4 | -3.0 | -5.2 | 4.4 | 4.1 | 2.9 | 1.8 |
| RO | 0.2 | -0.2 | -3.9 | 3.1 | 3.0 | 3.2 | 0.5 |
| SI | 4.3 | -1.1 | -1.1 | -2.1 | 1.0 | 2.0 | 0.5 |
| SK | 5.4 | -1.1 | -5.9 | -0.8 | -2.0 | 1.7 | 0.3 |
| FI | 2.5 | -2.4 | -4.3 | 5.1 | -2.7 | 1.1 | 2.1 |
| SE | : | : | : | : | : | : | : |
| UK | 0.4 | -1.6 | -1.8 | -0.2 | -1.8 | 6.7 | 0.0 |

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|------|---------------|------|------|---|-------|------|------|
| 2012 | С | F | G | N | O** | Р | Q |
| BE | 0.8 | -1.5 | -0.1 | -0.6 | *. | -2.3 | 5.6 |
| BG | 1.8 | -1.1 | -4.2 | 1.2 | -4.1 | 1.9 | 0.9 |
| CZ | 3.5 | -1.8 | -3.1 | 1.4 | 1.4 | 1.4 | 0.7 |
| DK | 1.8 | -2.2 | -2.5 | 1.0 | 0.5 | 1.5 | 1.8 |
| DE | 5.7 | -2.2 | 0.1 | 0.8 | 1.5 | -0.7 | 0.2 |
| EE | 1.4 | -3.0 | -0.2 | 2.7 | 0.1 | 1.9 | 1.0 |
| IE | 1.1 | -1.6 | 2.4 | 1.8 | 2.4 | -0.6 | -0.5 |
| EL | 8.0 | -1.3 | -3.0 | -0.3 | 1 | 3.8 | 2.2 |
| ES | 2.2 | -3.9 | -0.1 | 2.4 | -0.6 | -1.6 | 3.0 |
| FR | 3.8 | -1.8 | -1.4 | -3.0 | 3.8 | 1.9 | 0.5 |
| HR | : | : | : | : | : | : | : |
| IT | 4.9 | -2.7 | -1.5 | 0.9 | 7.1 | 0.9 | 2.0 |
| CY | 2.3 | -0.5 | -2.2 | 0.9 | -11.5 | -3.9 | -3.6 |
| LV | -0.2 | -0.6 | -2.5 | -1.3 | 2.1 | 3.8 | 2.1 |
| LT | -0.2 | -0.5 | -1.9 | 0.5 | 2.0 | 2.5 | 2.3 |
| LU | 0.7 | 0.2 | -1.1 | 3.7 | : | -4.3 | 1.2 |
| HU | : | : | : | : | : | : | : |
| MT | : | : | : | : | | : | : |
| NL | 0.5 | -0.1 | -1.6 | 1.2 | 1.1 | 0.6 | 0.8 |
| AT | 4.5 | 0.3 | 0.6 | 1.0 | : | -3.2 | -3.0 |
| PL | 0.8 | -3.6 | -0.2 | -0.1 | -2.0 | 1.4 | 2.8 |
| PT | 4.2 | -4.5 | -5.5 | 3.0 | 5.5 | 3.9 | 4.3 |
| RO | -0.2 | -1.2 | -4.3 | 3.0 | 0.5 | 3.5 | 0.7 |
| SI | 4.5 | -2.1 | -1.4 | -2.0 | 2.2 | 2.9 | 1.3 |
| SK | 6.9 | -0.7 | -6.2 | -1.4 | -1.2 | 1.7 | 1.5 |
| FI | 1.9 | -2.3 | -2.6 | 3.6 | -2.0 | 0.5 | 3.5 |
| SE | : | : | : | : | : | : | : |
| UK | 0.2 | -1.0 | -1.4 | 0.5 | -0.2 | 1.9 | 1.4 |
| | | | | | | | |

Number of hours worked & employees

- Main issues
- NACE C (Manufacturing) biggest in most countries, yet recorded biggest number of discrepancies
- persistent discrepancies over the years NACE C (DE, SK) NACE G (PT, SK)
- discrepancies in 2008 cleared in 2012 NACE C (EL, FR) NACE F (EL) NACE N (FI) NACE P (UK)
- new issue detected in 2012

NACE O (IT, CY, PT) NACE Q (BE



Number of hours worked

- 2012/2008 changes

LCS vs. NA (2012/2008) growth in total hours worked

Threshold: 2 pp per year

Countries:

SK (with LCS < NA)

BE, DE, CY, LU (with LCS > NA)

EL (LCS) vs crisis?

| III Cocai | Hours | | NCU |
|----------------|---------------------|-----------------------|------------|
| | growt total hour | Difference in p.p. | |
| | LCS | NA | |
| Belgium | 4.77% | 0.27% | 4.50 |
| Bulgaria | -3.83% | -3.58% | -0.24 |
| Czech Republic | -1.51% | -0.39% | -1.12 |
| Denmark | -3.31% | -1.69% | -1.63 |
| Germany | 2.83% | 0.60% | 2.22 |
| Estonia | -3.46% | -3.59% | 0.13 |
| Ireland | -4.54% | -3.78% | -0.76 |
| Greece | 2.23% | Ξ. | Ī. |
| Spain | -5.04% | : | <u>:</u> |
| France | -1.38% | -0.44% | -0.94 |
| Croatia | -3.10% | : | : |
| Italy | -2.23% | -1.44% | -0.79 |
| Cyprus | 0.99% | -1.68% | 2.67 |
| Latvia | -6.49% | -5.95% | -0.54 |
| Lithuania | -4.38% | -5.00% | 0.62 |
| Luxembourg | 3.03% | 0.70% | 2.34 |
| Hungary | -1.22% | : | : |
| Malta | -0.21% | : | : |
| Netherlands | -0.54% | -0.73% | 0.19 |
| Austria | -1.40% | -0.06% | -1.34 |
| Poland | -2.20% | -0.72% | -1.48 |
| Portugal | -4.83% | : | : |
| Romania | -2.70% | : | : |
| Slovenia | -2.86% | -4.08% | 1.22 |
| Slovakia | -3.75% | -0.34% | -3.41 |
| Finland | -1.13% | -0.52% | -0.61 |
| Sweden | 1.32% | = | : |
| United Kingdom | 0.75% | 0.12% | 0.63 |

Number of employees

- 2012/2008 changes

LCS vs. NA and LFS (2012/2008) growth in employees

| | Annual growth rates Differences between sources | | | | | | | | | |
|----------------|---|------|------|--------|---------|--------|---------------------------------------|---------------------------|-----------------------|--|
| | LCS | NA | LFS | LCS_NA | LCS_LFS | NA_LFS | LCS>2p.p. with LFS <u>OR</u> NA | NA < 2p.p. with LFS | Both cases TRUE | |
| Belgium | 6.1 | 0.4 | 0.8 | -5.6 | -5.3 | -0.4 | TRUE | TRUE | TRUE | |
| Bulgaria | -3.2 | -2.5 | -1.2 | 0.7 | 1.9 | -1.3 | FALSE | TRUE | FALSE | |
| Czech Republic | -1.7 | -0.6 | 0.1 | 1.0 | 1.7 | -0.7 | FALSE | TRUE | FALSE | |
| Denmark | -3.3 | -1.5 | 0.7 | 1.9 | 4.1 | -2.2 | TRUE | FALSE | FALSE | |
| Germany | 3.7 | 0.8 | -0.6 | -2.9 | -4.3 | 1.4 | TRUE | TRUE | TRUE | |
| Estonia | -3.7 | -1.4 | -0.5 | 2.3 | 3.2 | -0.9 | TRUE | TRUE | TRUE | |
| Ireland | -3.5 | -3.3 | 0.6 | 0.1 | 4.1 | -3.9 | TRUE | FALSE | FALSE | |
| Greece | <mark>2.2</mark> | -4.7 | -0.2 | -6.9 | -2.5 | -4.4 | TRUE | FALSE | FALSE | |
| Spain | -4.2 | -3.9 | 0.3 | 0.3 | 4.5 | -4.2 | TRUE | FALSE | FALSE | |
| France | 1.1 | -0.2 | 0.5 | -1.4 | -0.7 | -0.7 | FALSE | TRUE | FALSE | |
| Croatia | -2.2 | -2.6 | 0.8 | -0.3 | 3.0 | -3.3 | TRUE | FALSE | FALSE | |
| Italy | -1.1 | -0.4 | 0.5 | 0.7 | 1.6 | -0.9 | FALSE | TRUE | FALSE | |
| Cyprus | 0.2 | -0.7 | 2.7 | -0.9 | 2.6 | -3.4 | TRUE | FALSE | FALSE | |
| Latvia | -5.3 | -4.8 | -1.8 | 0.5 | 3.5 | -3.0 | TRUE | FALSE | FALSE | |
| Lithuania | -4.1 | -4.2 | -1.6 | -0.1 | 2.5 | -2.6 | TRUE | FALSE | FALSE | |
| Luxembourg | 3.7 | 2.0 | 2.8 | -1.7 | -0.9 | -0.8 | FALSE | TRUE | FALSE | |
| Hungary | -1.0 | 0.3 | -0.1 | 1.3 | 0.9 | 0.4 | FALSE | TRUE | FALSE | |
| Malta | -1.6 | 1.5 | 0.9 | 3.2 | 2.5 | 0.6 | TRUE | TRUE | TRUE | |
| Netherlands | -0.1 | -0.4 | 0.7 | -0.3 | 0.8 | -1.1 | FALSE | TRUE | FALSE | |
| Austria | -0.7 | *. | 0.6 | •• | 1.3 | : | •• | : | : | |
| Poland | -1.5 | -0.2 | -0.3 | 1.3 | 1.2 | 0.1 | FALSE | TRUE | FALSE | |
| Portugal | -4.1 | -2.6 | 0.1 | 1.5 | 4.2 | -2.6 | TRUE | FALSE | FALSE | |
| Romania | -2.5 | -1.0 | -0.2 | 1.5 | 2.4 | -0.8 | TRUE | TRUE | TRUE | |
| Slovenia | -2.5 | -1.8 | 0.1 | 0.8 | 2.7 | -1.9 | TRUE | TRUE | TRUE | |
| Slovakia | -3.6 | -1.5 | 0.2 | 2.0 | 3.8 | -1.7 | TRUE | TRUE | TRUE | |
| Finland | -1.4 | -0.6 | 0.6 | 0.9 | 2.0 | -1.2 | TRUE | TRUE | TRUE | |
| Sweden | 0.9 | 0.4 | -1.8 | -0.6 | -2.8 | 2.2 | TRUE | FALSE | FALSE | |
| United Kingdom | 0.8 | -0.3 | 0.7 | -1.1 | -0.1 | -1.0 | FALSE | TRUE | FALSE | |

Threshold:
2 pp per year

Countries:

BE, DE, EE, MT, SK (both LFS & NA)

RO, SI, FI (LCS departs LFS)

EL(LCS) vs. crisis?



II. Hourly labour costs 2012/2008 changes

LCS vs. LCI / NA (2012/2008)

LCS vs. LCI (**LCI?**) HR / MT / PT

LCS vs. NA (**LCS?)** CY / LT / RO / SK

LCI vs. NA (**LCI?)** CZ / HU / SI

| | labour cost | | | | | |
|----------------|-------------|--------|--------|--|--|--|
| | LCS/LCI | LCS/NA | LCI/NA | | | |
| Belgium | 0.6 | 1.2 | 0.7 | | | |
| Bulgaria | 0.2 | -0.1 | -0.3 | | | |
| Czech Republic | -1.4 | 1.0 | 2.4 | | | |
| Denmark | 0.7 | 0.7 | 0.0 | | | |
| Germany | -0.3 | 0.0 | 0.2 | | | |
| Estonia | 0.5 | -1.2 | -1.7 | | | |
| Ireland | 0.8 | 1.4 | 0.6 | | | |
| Greece | 1.1 | 0.2 | -0.9 | | | |
| Spain | 0.2 | 0.9 | 0.7 | | | |
| France | -0.1 | -0.1 | 0.0 | | | |
| Croatia | 2.1 | -0.4 | -2.5 | | | |
| Italy | -0.1 | 0.4 | 0.4 | | | |
| Cyprus | -1.0 | -2.5 | -1.5 | | | |
| Latvia | -0.2 | 0.0 | 0.2 | | | |
| Lithuania | 0.4 | -2.4 | -2.7 | | | |
| Luxembourg | -0.7 | -1.6 | -1.0 | | | |
| Hungary | -0.3 | 1.8 | 2.0 | | | |
| Malta | -3.3 | -1.1 | 2.2 | | | |
| Netherlands | 0.5 | 0.6 | 0.1 | | | |
| Austria | -0.7 | 0.3 | 1.0 | | | |
| Poland | 1.4 | -0.2 | -1.6 | | | |
| Portugal | 3.4 | 1.5 | -1.9 | | | |
| Romania | -1.6 | 5.6 | 7.2 | | | |
| Slovenia | 1.2 | -1.2 | -2.5 | | | |
| Slovakia | 1.8 | 2.6 | 0.8 | | | |
| Finland | 0.5 | 1.1 | 0.7 | | | |
| Sweden | -1.3 | -0.6 | 0.7 | | | |
| United Kingdom | 0.1 | -0.5 | -0.6 | | | |



Hourly labour costs 2012/2008 changes

LCS vs. LCI / NA (growth)
 wage / non-wage split
 bigger discrepancies

<u>Wages</u> (highest share in LC) similar as for labour costs

Non-wage costs

?LCS: MT

?LCI: SE

?NA: CY/LV/LU/HU/SK

| | V | age costs | | non-wage costs | | | |
|----------------|---------|-----------|--------|----------------|--------|--------|--|
| | LCS/LCI | LCS/NA | LCI/NA | LCS/LCI | LCS/NA | LCI/NA | |
| Belgium | 0.4 | 1.2 | 0.8 | 0.9 | 1.2 | 0.2 | |
| Bulgaria | 0.3 | 0.0 | -0.3 | -0.4 | -0.2 | 0.2 | |
| Czech Republic | -1.4 | 1.0 | 2.4 | -1.4 | 1.2 | 2.6 | |
| Denmark | 0.6 | 0.6 | 0.0 | 2.0 | 1.2 | -0.8 | |
| Germany | -0.3 | -0.2 | 0.1 | -0.4 | 0.6 | 0.9 | |
| Estonia | 0.6 | -1.1 | -1.7 | 0.2 | -1.4 | -1.7 | |
| Ireland | 0.9 | 1.7 | 0.8 | 0.6 | -1.4 | -2.0 | |
| Greece | 0.1 | -0.5 | -0.6 | 4.6 | 2.6 | -2.0 | |
| Spain | 0.3 | 1.2 | 0.9 | -0.2 | -0.3 | 0.0 | |
| France | -0.2 | -0.2 | 0.0 | -0.1 | -0.2 | -0.2 | |
| Croatia | 2.2 | -0.2 | -2.4 | 1.2 | -1.9 | -3.1 | |
| Italy | 0.0 | 0.3 | 0.3 | -0.1 | 0.5 | 0.6 | |
| Cyprus | -1.1 | -2.2 | -1.1 | -0.8 | -5.1 | -4.3 | |
| Latvia | -0.3 | 0.5 | 0.8 | 0.1 | -3.1 | -3.2 | |
| Lithuania | 0.4 | -2.6 | -3.1 | 0.1 | -1.5 | -1.6 | |
| Luxembourg | -0.8 | -1.3 | -0.5 | -0.1 | -3.6 | -3.5 | |
| Hungary | 0.3 | 2.2 | 1.9 | -1.2 | 2.2 | 3.4 | |
| Malta | -3.1 | -0.7 | 2.3 | -6.4 | -5.1 | 1.3 | |
| Netherlands | 0.4 | 0.6 | 0.2 | 0.7 | 0.4 | -0.3 | |
| Austria | -0.6 | 0.3 | 0.9 | -1.0 | 0.3 | 1.3 | |
| Poland | 0.8 | 0.0 | -0.8 | 3.8 | -2.2 | -6.0 | |
| Portugal | 3.3 | : | : | 4.0 | : | : | |
| Romania | -1.4 | 5.7 | 7.2 | -2.1 | 5.4 | 7.5 | |
| Slovenia | 1.0 | -0.7 | -1.7 | 2.9 | -4.2 | -7.1 | |
| Slovakia | 2.0 | 2.3 | 0.3 | 1.0 | 3.3 | 2.3 | |
| Finland | 0.5 | 1.0 | 0.5 | 0.4 | 1.6 | 1.2 | |
| Sweden | -0.6 | -0.7 | 0.0 | -2.7 | 0.2 | 2.9 | |
| United Kingdom | -0.3 | -0.4 | -0.1 | 1.9 | -1.2 | -3.2 | |



The participants to the workshop are invited to:

- ➤ Comment on a possible lack of LCS representativeness as regards the NACE structure of the economy;
- Comment on the discrepancies highlighted with regard to the growth rates in LCS vs. LCI / LFS and NA data;
- ➤ Inform of any methodological improvements planned in view of LCS2016 or in the LCI/NA field if relevant.





Thank you for your attention!

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